Title (en)
  HEATSINK

Title (de)
  KÜHLKÖRPER

Title (fr)
  DISSIPATEUR THERMIQUE

Publication
  EP 3510635 B1 20240131 (EN)

Application
  EP 16770003 A 20160921

Priority
  EP 2016072440 W 20160921

Abstract (en)
  [origin: WO2018054462A1] A heatsink (1) for natural convection cooling. The heatsink comprises a plurality of spaced plate fins (3) projecting from a base (2) with a given height, the plate fins (3) having a given length and the plate fins (3) being arranged to occupy a given space, the given space having a bottom side (11), a top side (10), a main lateral side (12) connecting the top side (10) and the bottom side (11) and at least secondary lateral side (13) connecting the top side (10) and the bottom side (10), a channel (4) for allowing air to flow along the plate fins (3), the channel (4) being formed between pairs of neighboring plate fins (3) with a bottom of the channel (4) being formed by the base (2) and the channels (4) being open or closed along their length to the main lateral side (12), at least one pair of neighboring plate fins (3) forms a channel (4) of a first type that extends between the bottom side (11) and the top side (10), and at least one pair of neighboring plate fins (3) forms a channel (4) of a second type that extends between the secondary lateral side (13) and the top side (10).

IPC 8 full level
  H01L 23/367 (2006.01); **F28F 3/04** (2006.01); **F28F 13/06** (2006.01); **H01L 23/467** (2006.01)

CPC (source: EP)
  F28F 3/048 (2013.01); **F28F 13/06** (2013.01); **H01L 23/3672** (2013.01); **H01L 23/467** (2013.01); F28F 2215/02 (2013.01)

Citation (examination)
  • US 2005034845 A1 20050217 - BARSUN STEPHAN KARL [US], et al
  • US 6847525 B1 20050125 - SMITH GRANT M [US], et al
  • WO 9927761 A1 19990603 - MUUNTOLAITE OY [FI], et al

Designated contracting state (EPC)
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DOCDB simple family (publication)
  WO 2018054462 A1 20180329; CN 109716512 A 20190503; CN 109716512 B 20210803; EP 3510635 A1 20190717; EP 3510635 B1 20240131

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  EP 2016072440 W 20160921; CN 201680089294 A 20160921; EP 16770003 A 20160921